

Date: Sat, 13 Aug 94 04:30:18 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V94 #270
To: Ham-Digital

Ham-Digital Digest Sat, 13 Aug 94 Volume 94 : Issue 270

Today's Topics:

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 TRS-80 MODEL 100
 Windows 3.1 and Baycom Modem TCP/IP networking

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 12 Aug 1994 22:58:13 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
usc!news.isi.edu!gremlin!lava!domae@network.ucsd.edu
Subject: 9600 Baud Mods for Radios ?
To: ham-digital@ucsd.edu

I'm looking for a mods database for various radios to allow them to
send/receive 9600 baud packet. Are there any electronic archives

that my have these mods available? How about some proceedings of
some of the various conferences?

Specifically, I'm looking for various All-Mode VHF/UHF transceivers dating
back to the Kenwood TS-700, ICOM IC-211, to present radios like the Yaesu 736R.

Thanks in advance,

--

Terry Domae

Northrop MS: T214/GB	Phone/Fax: 310/942-4694 310/948-8068	
8900 E. Washington Blvd	Internet: domae@lava.nrtc.northrop.com	
Pico Rivera, CA. 90660	Amateur Radio: KC6ROI	

Date: Fri, 12 Aug 1994 21:04:01 GMT
From: ihnp4.ucsd.edu!news.cerf.net!gopher.sdsc.edu!nic-nac.CSU.net!
channel.ecst.csuchico.edu!csusac!csus.edu!netcom.com!fmitch@network.ucsd.edu
Subject: Gracilis NOS
To: ham-digital@ucsd.edu

hi, mitch wa4osr here in mobile, alabama...

i am planning to add a packet port to our freenet/internet box in the
near future...

i wonder if anyone on the 'net here is running the gracilis NOS and
could give me some feedback on using the packet twin with nos ...

thanks
mitch

--

* * * I collect telegraph equipment (mostly bugs - Vibroplex) * * *

Email: fmitchell@rd.qms.com or, second choice, fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR, 11 Midtwon Park, E., Mobile, AL 36606 USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..

Date: 12 Aug 1994 00:07:02 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: KaGOLD W/ PacTOR

To: ham-digital@ucsd.edu

Ken,

The KAM is the only unit that supports PacTOR. You can use KaGOLD with PacTOR, but you will not be able to use the PacTOR option unless you have a KAM.

Larry N2ELW

Date: Sun, 7 Aug 94 17:56:21 -0500
From: news.delphi.com!usenet@uunet.uu.net
Subject: MFJ 1278 Ops
To: ham-digital@ucsd.edu

Kevin Bruce <kevinb@iconz.co.nz> writes:

>I have a Mfj 1278 and haven't really had a great success with it on some
>of the modes ie fax/sstv/rtty has anybody had similar probs or can offer
>me some advice as to how to get a better performance out of the 1278,I
>would also be pleased to hear on the performance of the 1278 on non
>Amateur bands such as news rtty services and the like.
>E-mail replies welcome many thanks.
> kevinb@iconz.co.nz

Kevin,I've been using the 1278 for a few years now and have had little trouble with it. I added the Pactor upgrade about a year ago and had a few problems but got them worked out. As far as the Fax mode it does a good job. The SSTV mode leaves something to be desired quality wise but it does receive and xmit color pixs ok. Rtty works fine..I found the tuning is the most critical on hf...it takes some time to get the hang of it... the tuning led's are a lot of help.Im using Multicom software with the 1278 which is a must for sstv and fax. What kind of problem's are you experiencing Kevin???

Brian/n6rzzr>>>>
bwalig@delphi.com

Date: Fri, 12 Aug 1994 15:25:45 GMT
From: brunix!rn@uunet.uu.net
Subject: Need mods to do FSK on Alinco DR-600
To: ham-digital@ucsd.edu

I would like to find out how to modify my Alinco DR-600T (2m/440 mobile) to be capable of low-speed (300 and 600 baud) FSK modulation. I am

playing around with some used pagers that have been recrystaled for the 440 band, and I need to encode & decode FSK. I'll be using A/D and D/A converters to generate and decode the signal. I just need to be know how to get directly at the discriminator, and varactor, of the DR-600. Can anyone help me out?

Rob Netzer, KD1TS
rn@cs.brown.edu

Date: 12 Aug 1994 00:10:29 GMT
From: newsgw.mentorg.com!wv.mentorg.com!hanko@uunet.uu.net
Subject: Need Phone Number for Kantronics
To: ham-digital@ucsd.edu

In article <32dtdc\$rdj@gv-gate.gvg.tek.com>, randyh@gvgadg.gvg.tek.com (Randy Hall) writes:

|> See above.
|>
|> Thanks
|> Randy
|> WA2AGE
|>

800 634-3308

--

Hank Oredson @ Mentor Graphics	Library Operations
Internet : hank_oredson@mentorg.com	"Parts 'R Us!"
Amateur Radio: WORLI@WORLI.OR.USA.NOAM	

Date: 12 Aug 1994 02:48:32 -0700
From: solano.community.net!solano.community.net!not-for-mail@uunet.uu.net
Subject: Node Responce
To: ham-digital@ucsd.edu

I have received alot of replys concerning my last posting concerning my Packet Habbits. The reply are evenly matched for and against such activitys (see previous post).

I would like to say a few words on my behalf.

I am aware on the fact when I do this activity I do tie up nodes. So I do this activity lat at night usaly starting around 00:00hrs pac.

and some time go as long as 05:00hrs pac. I do this at these times for two reasons: 1, there is little packet communications going on in my area at this time. 2, I run low power and often get stomped on by higher power stations during the peak hours.

There has been the comment to call out CQ when I get to a new node, I've tried that but usually no one's up that late.

If the owners of the nodes think I'm a nuisance they can kick me off, that's their prerogative. Usually when I get out far enough I usually time out some where along the line anyways.

I node hop like this because I like to see how far I can get if need be. and I usually set a goal in seeing if I can get to a certain city (current one St. Joseph MO, I have family there).

Thank you for your responses. Some of them I found quite entertaining, I'm glad that they were all polite in wording.

-Micah-
KD6PJM

Ps. The question concerning if there were nodes or bbses in or around St. Joseph MO was never answered.

Date: Thu, 11 Aug 1994 17:00:57 GMT
From: gatekeeper.us.oracle.com!barrnet.net!rational.com!jal@decwrl.dec.com
Subject: PACTOR/AMTOR subbands...where?
To: ham-digital@ucsd.edu

I am still an HF newbie and with the current state of the bands, it's not easy for us newbies. Last night while scanning around what should be the CW portion of the 40 meter band I heard a QSO between an Hawaiian station and some foreign station. Also the Hawaiian station claimed he was going to QSY back to a quiet spot he had found between two AMTOR subbands.

My questions are two:

- 1) How can a Hawaiian, which despite Dan Quayle not understanding is part of the US, transmit phone in a non-phone portion of the band.
- 2) My only reference for digital subbands is a handbook on digital published by the ARRL. It lists only one subband for AMTOR per band. Are there more subbands. Where can I find a current subband listing? Is the AMTOR subband the same subband as RTTY and PACTOR. I know that there is no such thing as a digital subband but you know what I am referring to.

Thanx

Joe LaRosa
KN6ZG
jal@rational.com

Date: Fri, 12 Aug 1994 16:11:38 GMT
From: world!dts@uunet.uu.net
Subject: PacTOR subbands
To: ham-digital@ucsd.edu

In article <32essg\$7pp@search01.news.aol.com>,
LarryN2ELW <larryn2elw@aol.com> wrote:

>Joe,

>

> I can't answer the first part of your question; but I can tell you
>where you'll find the digital modes on 40 meters. From about 7.065 to
>about 7.070 you'll hear alot of AMTOR. A G-TOR station or two will hang
>around 7.070 to about 7.072.

>PacTOR freely takes up the spectrum from about 7.073 to about 7.080 or
>thereabouts. At 7.080 to about 7.090, you'll hear alot of plain ol'
>vanilla RTTY. Above there you'll hear HF packet.

>

> Good luck and have fun!

>

>73 de Larry N2ELW

>LarryN2ELW@AOL.com

Try to keep 7.080 to 7.090 for Baudot RTTY. The space below the RTTY section
is where people do Amtor/Pactor/Gtor. The space above the RTTY area is where
packet is commonly run.

On 20 meters, 14.065 or so to 14.080 is where the Gtor/Amtor/Pactor modes
are used, the 14.080 to 14.090 space is for Baudot (and you'll find a
lot of DX on Baudot in this space) and above 14.095 is where there's
a lot of packet.

Layouts are similar on other bands... The fully automatic HF NPRM will
likely cause a shift in where the packet signals are, since they'll be
in limited subbands (along with any other mode being run full-auto)
once that NPRM becomes part of the rules.

--

Daniel Senie

Internet: dts@world.std.com

Daniel Senie Consulting
508-779-0439

n1jeb@world.std.com
Compuserve: 74176,1347

Date: 12 Aug 1994 23:55:51 -0700
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!overload.lbl.gov!agate!news.ossi.com!
news.fujitsu.com!amdahl!pacbell.com!UB.com!kaiwan.com!kaiwan!
dmercado@network.ucsd.edu
Subject: PCMCIA TNC?
To: ham-digital@ucsd.edu

In <327s90\$qqe@hopper.acm.org> smithson@ACM.ORG writes:

>Anybody know if there is a PCMCIA TNC product yet?
>-Brian
>smithson@acm.org

One question: How much are you willing to pay for an item.
-Dominic

Date: 10 Aug 1994 18:23:37 -0700
From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!zip.eecs.umich.edu!
yeshua.marcam.com!insosf1.infonet.net!news.i-link.com!news.sprintlink.net!
cyberspace.com!cyberspace.com!not-for-mail@.
Subject: PKGOLD Enhanced PROBLEMS
To: ham-digital@ucsd.edu

TO ALL HAMS USING PKGOLD ENHANCED

I have ran into a problem with the latest version of PKGOLD Enhanced
with Pactor. It seems to exit the program with the following:

```
DISK ERROR 100
DISK READ error
record -1 in GOLD.BD
```

This is found on the screen after the program dumps out. Timing of the
exit from the program is random meaning 5hrs or 1hr after loading the
program and has even done it while in the connect mode as well. It will
leave the TNC open so that the buffer fills up and no connects can
happen. Having the ***SAME*** version for the Kantronics TNC (KAGOLD)
for use with the KAM+ and the KPC models and using the ***SAME*** computer
WITHOUT ONE problem at any time and I can leave it without worry
PKGOLD I can not do that at all. (also tried it on other computers with the

same results)

One other problem I have notice is that opening a connect window it is full of junk chars which should not be there. ?????????? (PKGOLD ONLY)

Interfex claims it doesnt have any problems and thinks it mine. Why can I run the same versin for the Kantronics TNC without any problems but yet I can not run the PKGOLD (extra cost) with the AEA products.
(PK-232, PK-88, PK-96)

Also how many commercial programs leave out the manual because you have it with your other versions of gold

Has anyone seen or have the so called DUALPORT PKGOLD yet.

Richard N7VWJ

Send replys to the following:

Packet Address	N7VWJ@N7DUO.#WWA.WA.USA.NA
AMPRnet Address	n7vwj.ampr.org 44.24.101.54
E-MAIL Address	ranger@eskimo.com

Date: Sun, 07 Aug 94 19:39:50 EST
From: ihnp4.ucsd.edu!muninari.oz.au!sgiblab!sgigate.sgi.com!olivea!
charnel.ecst.csuchico.edu!nic-nac.CSU.net!usc!howland.reston.ans.net!wupost!
slacc.com!nf0r@network.ucsd.edu
Subject: SUB FOR BAYCOM 1.5A
To: ham-digital@ucsd.edu

WONDERING IF THERE IS A GOOD SUBSTITUTE FOR THE BAYCOM 1.5A SOFTWARE? i AM USED A PACCOMM BAYMOD-9, WHICH DOES A SUPER JOB WITH MY TOSHIBA 1900 AND AN ALINCO DJ-560. THERE IS REALLY NOTHING WRONG WITH THE VERSION 1.5A SOFTWARE. JUST LOOKING FOR A CHANGE OF SCENERY. TAHNKS. YOU ADVICE WILL BE APPRECIATED. 73 DE DAVE, NF0R

--

SLACC STACK BBS - St. Louis, Missouri USA
The Bulletin Board Service of the St. Louis Area Computer Club
For information, email to: server@slacc.com Subject: HELP
+1 314.367.1903

Date: Sat, 13 Aug 94 01:45:18 CST
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!
convex!news.duke.edu!news-feed-1.peachnet.edu!umn.edu!newsdist.tc.umn.edu!
msus1.msus.edu!msus1@ihnp4.ucsd.edu
Subject: TNC construction article
To: ham-digital@ucsd.edu

Does anybody know of a construction article for a "general purpose" TNC?

These are my requirements:

- 1) Standard serial connection. (I have 4 different computers and would like to be able to connect to all).
- 2) An internal processor of some type to minimize the overhead on the computer.

If these are too strict, please let me know.
Thanks.

Bill Soranno -- KB0NKX
7 Fairfax
Winona, MN 55987
507/452-3789

Date: 11 Aug 1994 22:23:40 -0500
From: news.sprintlink.net!sashimi.wwwa.com!gagme.wwwa.com!not-for-mail@uunet.uu.net
Subject: TRS-80 MODEL 100
To: ham-digital@ucsd.edu

My two cents: I use my old TRS-80 Model 100 for portable packet operation. Just the last weekend, I was operating portable picnic packet, when I ran out of juice for my 386 GRiD laptop. I did bring the M100, and four fresh "AA" batteries. I switched the RS232 cable, and didn't miss a packet.

Signed,

Just using M100 Built-in Terminal

Ted Kekatos, N9IXE

Date: 12 Aug 1994 17:08:06 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!
howland.reston.ans.net!usenet.ins.cwru.edu!cleveland.Freenet.Edu!
ei938@network.ucsd.edu
Subject: Windows 3.1 and Baycom Modem TCP/IP networking
To: ham-digital@ucsd.edu

Packet Radio Folks,

I have a question regarding Windows 3.1 or WFW and ham/packet radio: Is there a Windows or WFW driver available for the Baycom packet radio modem that would allow TCP/IP networking functions over packet radio?

I understand that Windows 3.1 or WFW can use TCP/IP networking with the WINSOCK.DLL. This provides TCP/IP networking services to an Windows TCP/IP application. Whatever networking medium used requires a driver, ie SLIP/PPP, ethernet, token ring, etc.

Ham/packet radio also uses TCP/IP as a protocol in local area networks. I have a Baycom modem and plan to use the AX.25 driver with the DOS program KA9Q NOS to access the local TCP/IP packet network.

My question is: Is there a way to tie the Baycom modem into Windows 3.1 or WFW? You could then use the TCP/IP applications over packet radio just like you would over an ethernet or SLIP/PPP, only much slower. I think you would need a packet driver like the ethernet cards require.

Has anyone got any information on this? If I get any responses, I will combine and post to this list.

THANKS IN ADVANCE!!

Andrew Lynch, N8VEM
alynch@wpgate1.wpafb.af.mil

PS. I have searched the ham/packet FTP archives for this and did archie searches as well, with no luck. I suspect nothing like this exists. I realise this may be esoteric, but I think this would be one very interesting technical project. If there are any ham/packet radio enthusiasts looking for a challenge, who are also Windows expert programmers, this project may be for you. This project probably would require programming experience writing windows drivers therefore this is WAY out of my league.

There are DOS programs which do this in existence, with source code, so I think its *theoretically* possible. If Windows WINSOCK.DLL provides the TCP/IP services, I think all that's needed is a Windows packet driver for the Baycom modem. The Baycom AX.25 driver for DOS (NOS) includes documented assembler source code, but no

doubt a Windows version would be VERY different.

Send me email if you would like to discuss more.

73!!

Date: 12 Aug 1994 23:56:16 GMT
From: newsgw.mentorg.com!wv.mentorg.com!hanko@uunet.uu.net
To: ham-digital@ucsd.edu

References <32bj9r\$861@search01.news.aol.com>,
<JAY.39.2E4A3859@medicine.dmed.iupui.edu>,
<1994Aug12.154901.27305@ke4zv.atl.ga.us>
Reply-To : Hank_Oredson@mentorg.com
Subject : Re: Packet Node Info Wanted

In article <1994Aug12.154901.27305@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:

|> In article <JAY.39.2E4A3859@medicine.dmed.iupui.edu>
JAY@medicine.dmed.iupui.edu (Jay Sissom) writes:
|> >Interesting, an Amateur Radio mode where DXing is discouraged! This is a new
|> >one. . .
|>
|> Not that new, try Dxing repeaters and see what kind of ire you raise when
|> you key up several at once again and again. Packet and repeaters are both
|> service oriented rather than DX oriented. The idea is to provide *reliable*
|> service to a designated area, not to support freak long distance comms.
|>
|> >I agree that people should use their closest BBS, but there shouldn't be any
|> >problems with people node hopping to see how far they can get! Experimenting
|> >is what ham radio is all about, isn't it?
|>
|> Experimenting is fine, trying to *use* the systems in realtime more than
|> 3 or 4 hops away, however, is just asking for trouble. You're going to
|> retry out, and in the process probably crash someone else's forwarding
|> session. With a little care, just probing the network out of curiosity
|> won't hurt a thing. But the current state of the networks simply won't
|> support actually trying to *use* the network in realtime over many hops.

Unless, of course, the area you are in has a reasonable network.

In this part of the country, you can reliably connect out to 8, 10, or sometimes even 14 hops. Up to 8 hops you can even "use" the services you find at the end of your path, nearly as well as if they were a couple hops from you. So it really depends on whether the folks who

built the network did a good job of building it ... or not ...

|> Hopefully that'll change some day soon as we bring up faster hardware,
|> find more reliable paths, and switch to more robust network protocols.
|> For right now, however, the VHF network is very delicate in many areas.
|> About all it can support is closely controlled timed forwarding of
|> traffic from BBS to BBS.

This statement is certainly not true of the networks in the NW states ...

... Hank

--

Hank Oredson @ Mentor Graphics Library Operations
Internet : hank_oredson@mentorg.com "Parts 'R Us!"
Amateur Radio: W0RLI@W0RLI.0R.USA.NOAM

Date: 12 Aug 1994 15:57:51 GMT
From: hearst.acc.Virginia.EDU!portal.gmu.edu!bzy.gmu.edu!smasters@uunet.uu.net
To: ham-digital@ucsd.edu

References <325vel\$3ua@newshost.lanl.gov>, <Cu8oLH.11v@dorsai.org>,
<1994Aug10.001546.914@msus1.msus.edu>ku
Subject : Re: 900 MHz spread spectrum systems

Michael S. Morgan (mmorgan@solar.NoSubdomain.NoDomain) wrote:
: Wasn't one of the main purposes of spread spectrum to make it
: harder to jam a signal? The encryption is just ancillary, and
: not that good? The encryption only becomes secure when you
: use a one time pad...right?

: Mike

Spread spectrum was not developed as an encryption scheme. The
properties that makes it desirable are :

Protection against jammers. This is measured in the AJ (anti-
jam) ratio. Some simple math shows how much more jammer
energy is needed to cause bit errors(digital communications)

Low probability of intercept. SS signals can be placed below the
noise floor in many cases. This means that covert operation
can be conducted with some communications.

Most people confuse the encryption with the last one. If the method

for spreading and the code is known, a little bit of work will show you the signal. For more information I believe Sklar's "Digital Communications" has a chapter on it. This was the text that was used when I took a class on this, and it seemed pretty good.

73,

Shawn KE4GHS

End of Ham-Digital Digest V94 #270
